



Ioan ZAHARIE

POLITEHNICA University Timișoara, Physics Department,
Vasile PARVAN blv., nr.2, Timișoara 300220 Romania

Mobile: +40724187854

Phone: +40256403090

Fax: +40256403090

Email: ioan.zaharie@upt.ro; ioan.zaharie@fiz.upt.ro; izaharie@gmail.com

URL: <http://solar.fiz.upt.ro/ioan-zaharie>

[ORCID](#)

[Scopus ID](#)

[Google Scholar](#)

[researchgate](#)

Current position

Lecturer, Physics Department, POLITEHNICA University Timișoara, Romania

Areas of specialization / Interest domains

Physics; Solar energy; Amorphous Alloys; Solid State Physics; Quantum Information

Appointments held

1989-present POLITEHNICA University Timișoara
1987-1989 ITCI Timișoara
1985-1987 ME, Alba Iulia

Education

2000 PhD in Physics, West University Timișoara
1985 B.S. in Engineering Physics, Nuclear Reactors, Physics Faculty, Bucharest University

Grants, honors & awards

2008 AGIR Diploma
2009 BOLOGNA Professor

Publications & talks

Journal articles

ISI Journal articles

- 2012 Ildiko TATAI, Ioan ZAHARIE, “The energy transfer between the ports of an implemented gyrator using LM13700 operational transconductance amplifier”, *Review of Scientific Instruments* 83, (11), 114702-1 - 114702-5, (2012) **3 ISI citations**
- 2012 Ciprian HEDREA, Romeo NEGREA, Ioan ZAHARIE, “The $1/2$ Correction Forms in Geometric Quantization of the Symmetric Free Rigid Body”, *International Journal of Geometric Methods in Modern Physics* 9(7), 1220011-1 - 1220011-7, (2012) **1 ISI citations**
- 2011 Ciprian HEDREA, Romeo NEGREA, Ioan ZAHARIE, Mircea PUTA, “On a Problem of Geometric Quantization”, *International Journal of Geometric Methods in Modern Physics* 8, (6), 1259-1268, (2011) **1 ISI citations**
- 2009 Ioan ZAHARIE, “On the structural relaxation of $Fe_{65}Gd_5Cr_{10}B_{20}$ amorphous alloys”, *Journal of Alloys and Compounds* 481, (1-2), 173-175, (2009) **3 ISI citations**
- 2008 Popov Dušan, Sajfert V., Ioan ZAHARIE, “Pseudoharmonic Oscillator and Their Associated Gazeau-Klauder Coherent States”, *Physica A – Statistical Mechanics and Its Applications* 387, (16-17), 4459-4474, (2008) **14 ISI citations**
- 2008 Dusan POPOV, Ioan ZAHARIE, Vjekoslav SAJFERT, Ioan LUMINOSU, Deian POPOV, “Quantum information in the frame of coherent states representation”, *International Journal of Theoretical Physics* 47, (5), 1441-1454, (2008) **1 ISI citations**
- 2008 Ioan LUMINOSU, Dusan POPOV, Ioan ZAHARIE, “Spectral Absorption of Unpolarized Light Through Nano-Materials in the Absence of a Magnetic Field”, *Science of Sintering* 40, (3), 223-234, (2008) **2 ISI citations**
- 2006 Dusan POPOV, Ioan ZAHARIE, Dong SHI-HAI, “Photon-added coherent states for the Morse oscillator”, *Czechoslovak Journal of PHYSICS* 56, (2), 157-176, (2006) **13 ISI citations**
- 2002 B.ROTHENSTEIN, Ioan ZAHARIE, “The game of the ‘very small’ and the ‘very big’”, *European Journal of Physics* 23, (4), L25-L28, (2002) **1 ISI citations**
- 2001 Ioan MIHALCA, Aurel ERCUȚA, Ioan ZAHARIE, Victor KUNCSEK, George FILOTI, Adrian JIANU, “Crystallization of $Fe_{75}Cr_5B_{20}$ Amorphous Alloys”, *Journal of Optoelectronics and Advanced Materials* 3, (1), 141-144, (2001) **1 ISI citations**
- 1996 Ioan MIHALCA, Aurel ERCUȚA, Ioan ZAHARIE, Adrian JIANU, Victor KUNCSEK, George FILOTI, “Annealing effects in amorphous $Fe_{77}Gd_3B_{20}$ ribbons”, *Journal of Magnetism and Magnetic Materials* 157/1, (1), 161-162, (1996) **3 ISI citations**

1995 Ioan MIHALCA, Ioan ZAHARIE, Aurel ERCUȚA, Gheorghe DRĂGĂNESCU, “Anomalous relaxation in amorphous $\text{Fe}_{70}\text{Cr}_{10.5}\text{P}_{11.5}\text{C}_{6.5}\text{Mn}_{1.5}$ ”, *Journal of Non-Crystalline Solids* 192/1, (1), 428-430, (1995) 4 ISI citations

1994 Ioan MIHALCA, Aurel ERCUȚA, Ioan ZAHARIE, “Relaxation Kinetics in Amorphous Alloys $\text{Fe}_{70}\text{Cr}_{10.5}\text{P}_{11.5}\text{C}_{6.5}\text{Mn}_{1.5}$ Amorphous Alloy”, *Romanian Reports in Physics*, 46(2-3), 225-228, (1994)

BDI articles

2014 Ciprian HEDREA, Ioan ZAHARIE, Romeo NEGREA, Emanuel DANCI, Mihai PĂTRĂȘCOIU, “On the efficiency of the paraboloidal concentrator installed on oriented roofs” *Buletinul Științific al UPT, seria Matematică - Fizică* 59(73) (2), 46-55, (2014)

2009 DAMIAN Ioan, CRISTEA Minerva, LUMINOSU Ioan, Ioan ZAHARIE, COSTACHE Marius, CHIRIȚOIU Viorel, “Extraction of Solar Cell Parameters from I-V Characteristics of a Photovoltaic Panel in a Four-parameter Model”, *Buletinul Științific al UPT, seria Matematică - Fizică* 54, (68), 90-97, (2009)

2009 CĂRUNTU Bogdan, NEGREA Romeo, Ioan ZAHARIE, LUMINOSU Ioan, “Numerical Solution for the 2-Dimensional Quantum Hydrodynamic Model Equations”, *Buletinul Științific al UPT, seria Matematică - Fizică* 54, (68), 77-83, (2009)

2009 HEDREA Ciprian, NEGREA Romeo, Ioan ZAHARIE, “The Nonlinear Stability of the Equilibrium States via Controls in the Rigid Body Dynamics with a Fixed Point and a Particle Oscillating in It”, *Buletinul Științific al UPT, seria Matematică - Fizică* 54, (68), 8-16, (2009)

2008 LUMINOSU Ioan, Ioan ZAHARIE, CHIRIȚOIU Viorel, NEGREA Romeo, CĂRUNTU Bogdan, “The Numerical Study of the Optical Efficiency of the Static Concentrators”, *Buletinul Științific al UPT, seria Matematică - Fizică* 53-2, (67), 76-80, (2008)

2008 Ioan ZAHARIE, “On the Non-Isothermal Crystallization Kinetics of $\text{Fe}_{65}\text{Cr}_{15}\text{B}_{20}$ Amorphous Alloys”, *Buletinul Științific al UPT, seria Matematică - Fizică* 53-2, (67), 70-75, (2008)

2008 HEDREA Ciprian, NEGREA Romeo, Ioan ZAHARIE, “New Contributions on an Optimal Control Problem in \mathbb{R}^3 ”, *Buletinul Științific al UPT, seria Matematică - Fizică* 53-2, (67), 25-31, (2008)

2008 CRISTEA Minerva, CHIRIȚOIU Viorel, COSTACHE Marius, Ioan ZAHARIE, DAMIAN Ioan, “Modelling of a small encapsulated photovoltaic cell”, *Buletinul Științific al UPT, seria Matematică - Fizică* 53-1, (67), 103-110, (2008)

2007 CRISTEA Minerva, DAMIAN Ioan, CHIRIȚOIU Viorel, Ioan ZAHARIE, COSTACHE Marius, “On a Simple Model of the Typical Cell from a Solar Panel”, *Buletinul Științific al UPT*,

seria Matematică - Fizică 52-2, (66), 101-111, (2007)

- 2007 CHIRIȚOIU Viorel, Ioan ZAHARIE, LUMINOSU Ioan, "Numerical Study of Quantum Hydrodynamic Model for Semiconductors", *Buletinul Științific al UPT, seria Matematică - Fizică* 52-2, (66), 64-70, (2007)
- 2007 CĂRUNTU Bogdan, Ioan ZAHARIE, NEGREA Romeo, CHIRIȚOIU Viorel, "Finite Difference Solution for the 1-dimensional Quantum Hydrodynamic Model Equations", *Buletinul Științific al UPT, seria Matematică - Fizică* 52-2, (66), 56-63, (2007)
- 2006 Ioan ZAHARIE, "Analysis of the Classical Shift Doppler Formulas", *Buletinul Științific al UPT, seria Matematică - Fizică* 51-1, (65), 88-94, (2006)
- 2004 Ioan ZAHARIE, "On the Crystallization Kinetics of Fe₆₀Gd₁₀Cr₁₀B₂₀ Amorphous Alloys", *Buletinul Științific al UPT, seria Matematică - Fizică* 49-1, (63), 74-79, (2004)
- 2003 ROTHENSTEIN Bernhard, Ioan ZAHARIE, "The Physics Behind the Phase Invariance Derivation of Doppler Shift Formulas", *Buletinul Științific al UPT, seria Matematică - Fizică* 48-2, (62), 88-92, (2003)
- 2003 ROTHENSTEIN Bernhard, Ioan ZAHARIE, "With the Relativistic Velocity Addition Law through Special Relativity", *Buletinul Științific al UPT, seria Matematică - Fizică* 48-1, (62), 51-58, (2003)
- 2002 ROTHENSTEIN Bernhard, Ioan ZAHARIE, "Zero, Infinite and Negative Reception Periods of Acoustic Signals ? What Does That Mean ?", *Buletinul Științific al UPT, seria Matematică - Fizică* 47-2, (61), 69-74, (2002)
- 2001 Ioan ZAHARIE, LIȚĂ Marin, "The Crystallization Kinetics of Fe₆₅Gd₁₀Cr₅B₂₀ Amorphous Alloys", *Buletinul Științific al UPT, seria Matematică - Fizică* 46-2, (60), 74-79, (2001)
- 1992 Ioan ZAHARIE, "On the Waves Diffraction Phenomenon", *Buletinul Științific al UPT, seria Matematică - Fizică* 37, (51), 123-126, (1992)

Neindexed journals articles

- 2009 Ioan ZAHARIE Ioan LUMINOSU, Viorel CHIRIȚOIU, "A Comparative Study of Paraboloidal Concentrator Installed on Oriented Roofs", *Annals of University of Oradea, Physics Section*, XIX, 19-24, (2009)
- 2009 Viorel CHIRIȚOIU, Ioan ZAHARIE Ioan LUMINOSU, "A Numerical Study of Two Dimensional Quantum Hydrodynamic Model for Semiconductors", *Annals of University of Oradea, Physics Section*, XIX, 5-11, (2009)

- 2008 Ioan LUMINOSU, Ioan ZAHARIE, Darius IGNEA, “The Study of a Paraboloidal Optical Concentrator by Ray-Tracing Method: Foundations”, *Moldavian Journal of the Physical Sciences* 7, (2), 224-228, (2008) 1 ISI citations
- 2008 Ioan ZAHARIE, Ioan LUMINOSU, Darius IGNEA, “The Study of a Paraboloidal Optical Concentrator by Ray-Tracing Method: Results”, *Moldavian Journal of the Physical Sciences* 7, (2), 229-233, (2008) 1 ISI citations
- 2008 Viorel CHIRIȚOIU, Ioan ZAHARIE, Romeo NEGREA, Bogdan CĂRUNTU, “Numerical Study of Quantum Hydrodynamic Model for Semiconductors”, *Moldavian Journal of the Physical Sciences* 7, (2), 168-173, (2008)
- 2008 Romeo NEGREA, Ioan ZAHARIE, Viorel CHIRIȚOIU, Bogdan CĂRUNTU, “On a Quantum Hydrodynamic Model for a Photovoltaic Cell”, *Moldavian Journal of the Physical Sciences* 7, (1), 96-102, (2008)
- 2005 Ioan ZAHARIE, Daniela ZAHARIE, “Evolutionary Optimization of Molecular Clusters”, *Studia Universitatis Babeș-Bolyai, Physica L*, (4a), 447-450, (2005)
- 2004 Bernhard ROTHENSTEIN, Ioan ZAHARIE, “The Relativistic Velocity Addition Law through Special Relativity”, *Journal of Theoretics* 6, (4), (2004)
- 2003 Ioan ZAHARIE, Daniela ZAHARIE, “On the Determination of the Crystallization Energy in Non-Isothermal processes by Using Evolutionary”, *Studia Universitatis Babeș-Bolyai, Physica XLVIII*, (-), 317-320, (2003)
- 2003 Bernhard ROTHENSTEIN, Ioan ZAHARIE, “An Exact Doppler Shift Formula in the Spherical Acoustic Wave”, *Journal of Theoretics* 5, (5), (2003) 1 ISI citations
- 2003 Bernhard ROTHENSTEIN, Ioan ZAHARIE, “Relativistic Thermodynamics for the Introductory Physics Course”, *Journal of Theoretics* 5, (2), (2003)
- 2003 Bernhard ROTHENSTEIN, Ioan ZAHARIE, Doru Marin PĂUNESCU, “Natura non facit saltus: An Uncommon Way to Relativistic Dynamics”, *Journal of Theoretics* 5, (2), (2003)
- 2003 Bernhard ROTHENSTEIN, Ioan ZAHARIE, “Invariance of the Counted Number of Photons : Some Didactic Opportunities”, *Journal of Theoretics* 5, (2), (2003)
- 1997 Ioan MIHALCA, Victor KUNCSEK, George FILOTI, Aurel ERCUȚA, Ioan ZAHARIE, Adrian JIANU, Ovidiu CRIȘAN, “Crystallization Kinetics of Amorphous Fe₇₃Gd₂Cr₅B₂₀ Ribbons”, *Proc. Suppl. Balkan Physics Letters* 5, (-), 4, 611-614, (1997)
- 1995 Ioan MIHALCA, Aurel ERCUȚA, Ioan ZAHARIE, Aurel Viorel ȘERBAN, “Thermal Activated Structural Relaxation in Fe₇₀Cr_{10.5}P_{11.5}C_{6.5}Mn_{1.5} Amorphous Alloy”, *Analele Univ. Timisoara, seria Științe Fizice XXXIII*, (-), 48-52, (1995)

1995 Aurel ERCUȚA, Ioan MIHALCA, [Ioan ZAHARIE](#), “On the Curie Temperature Determination in Iron-Based Amorphous Alloys”, *Analele Univ. Timisoara, seria Științe Fizice XXXIII*, (-), 41-47, (1995)

Conferences articles

ISI Conference Proceeding articles

2018 [Ioan ZAHARIE](#), Geza-Mihai ERDODI, Marius DUDU, “The Functioning of a Wind System at its Maximum Power”, *SACI 2018 • IEEE 12th International Symposium on Applied Computational Intelligence and Informatics • May 17-19 • Timișoara, Romania*, 585-588, (2018)

2012 [Ioan ZAHARIE](#), Viorel Laurențiu CARTAȘ, “The path integral formalism applied on the quantum rigid rotator”, *TIM-11, 24-27.11.2011, Timisoara AIP1472*, 95-100, (2012)

2012 Viorel Laurențiu CARTAȘ, [Ioan ZAHARIE](#), “The anyon’s knotted paths and M. Kontsevich integral”, *TIM-11, 24-27.11.2011, Timisoara AIP1472*, 17-24, (2012)

2010 [Ioan ZAHARIE](#), ZAHARIE Daniela, “On The Non-Isothermal Crystallization of Fe₆₀Gd₅Cr₁₅B₂₀ Amorphous Alloys”, *BPU 7 - 7th International Conference of the Balkan Physical Union, 09-13.09.2009, Alexandroupolis, Greece AIP 1203*, 335-340, (2010)

2010 Cristea Minerva, Chiritoiu Viorel, Costache Marius, [Ioan ZAHARIE](#), Luminosu Ioan, “On a Model of the Typical Cell from a Solar Panel”, *BPU 7 - 7th International Conference of the Balkan Physical Union, 09-13.09.2009, Alexandroupolis, Greece AIP 1203*, 433-438, (2010)

2 ISI citations

2009 [Ioan ZAHARIE](#), Negrea Romeo, Hedrea Ciprian, “A Quantum Hydrodynamic Model for a Photovoltaic Cell”, *TIM-08, 28-29.11.2008, Timisoara AIP 1131*, 67-71, (2009) 1 ISI citations

2007 Popov Dușan, [Ioan ZAHARIE](#), Sajfert V., Popov D. Dejan, “Coherent States and Their Role in Quantum Information Theory”, *BPU 6 - Sixth International Conference of the Balkan Physical Union, 22-26.08.2006, Istanbul, Turkey 899*, 640, (2007)

Neindexed conference articles

2018 [Ioan ZAHARIE](#), Mircea GOLOSIE, “Anthropic Radioactive Pollution in Romania”, *International conference KNOWLEDGE-BASED ORGANIZATION vol25(3)* (2019)

2019 [Ioan ZAHARIE](#), Mircea GOLOSIE, “About the irradiation on the GĂINA mountain”, *Tourism and durable development, 8nd International Symposium, 11-13.04.2019, Timisoara QUAESTUS 14/April* (2019)

2018 [Ioan ZAHARIE](#), Mircea GOLOSIE, “Natural Radioactivity of Geothermal Waters from Herculan Area”, *Nuclear 2018” - 23-25 mai 2018 - Annual International Conference on Sustainable Development through Nuclear Research and Education* (2018)

- 2018 Mircea GOLOSIE, Ioan ZAHARIE, "Mining works in the TRANSFAGARASAN-ARGES AREA", *Tourism and durable development, 7nd International Symposium, 19-21.04.2018, Timisoara* QUAESTUS 12/April (2018)
- 2017 Mircea GOLOSIE, Ioan ZAHARIE, "Environmental problems on the roads from the Banat's Mountains", *Tourism and durable development, 6nd International Symposium, 04-06.05.2017 Timisoara* QUAESTUS 10/April(2017)
- 2014 Mircea GOLOSIE, Ioan ZAHARIE, "On the shale gas exploitation radioactivity", *Tourism and durable development, 3nd International Symposium, 03-05.04.2014, Timisoara* 68-80, (2014)
- 2013 Mircea GOLOSIE, Ioan ZAHARIE, "Tourism in abandoned mining areas", *Tourism and durable development, 2nd International Symposium, 18-20.04.2013, Timisoara* 140-145, (2013)
- 2011 Mircea GOLOSIE, Ioan ZAHARIE, "Radioactivity of some underground and ground waters", *Proceedings of NUCLEAR 2011, 25-27 mai 2011, Pitesti* CD (2011)
(2009), "A 3-Dimensional Model for Photovoltaic Cell", *BPU7, 09-13.09.2009, 1-197*, (2009)
- 2009 Ioan ZAHARIE, "On the Crystallization of the Fe₇₀Cr₁₀B₂₀ Amorphous Alloys", *ICOM 2009. 2nd International Conference on Physics of Optical Materials and Devices, 27-08-2009* 1-140, (2009)
- 2009 Ioan ZAHARIE, Ioan Luminosu, "A Comparative Study of the Parabolic Concentrator Installed on Oriented Roofs", *ICOM 2009. 2nd International Conference on Physics of Optical Materials and Devices, 28-08-2009* 1-141, (2009)
- 2008 Ioan DAMIAN, Minerva CRISTEA, Ioan ZAHARIE, Marius COSTACHE, Viorel CHIRIȚOIU, "A four-parameter model for medium behaviour of a cell from a photovoltaic panel", *52 Conference ETRAN, 09-12.06.2008 IEEE, 2*, (2008)
- 2008 Romeo NEGREA, Ioan ZAHARIE, Bogdan CĂRUNTU, Ioan LUMINOSU (2008), "On 2 – dimensional Quantum Hydrodynamic Model for a Photovoltaic Cell", *52 Conference ETRAN, 08-12.06.2008 IEEE, 2*, (2008)
- 2008 Viorel CHIRIȚOIU, Ioan ZAHARIE, Romeo NEGREA, Bogdan CĂRUNTU (2008), "Numerical Study of two Dimensional Quantum Hydrodynamic Model for Semiconductors", *QUANTSOL 2008, 02-07.03.2008* 2, (2008)
- 2008 Minerva CRISTEA, Ioan DAMIAN, Viorel CHIRIȚOIU, Ioan ZAHARIE, Marius COSTACHE, "About Modelling of Medium Behaviour of a Photovoltaic Cell from a Solar Module", *QUANTSOL 2008, 02-07.03.2008* 2, (2008) 1 ISI citations
- 2008

- [Ioan ZAHARIE](#), Ioan LUMINOSU, Darius IGNEA, “On the Efficiency of the Paraboloidal Static Optical Concentrator”, *EUROSUN 2008, 7-10.10.2008, Lisbon, Portugal Book of Abstracts*, 2, (2008)
- 2008 Ioan DAMIAN, Minerva CRISTEA, Ioan LUMINOSU,[Ioan ZAHARIE](#), Marius COSTACHE, Viorel CHIRIȚOIU, “Extraction of solar cell parameters from I-V characteristics of a photovoltaic panel”, *International Workshop PV Trends, 28-30.07.2008, Bucharest, Romania* 2, (2008)
- 2008 Romeo NEGREA, [Ioan ZAHARIE](#), Bogdan CĂRUNTU, Ioan LUMINOSU, “Analytical and numerical approach of 3-dimensional quantum hydrodynamic models for a photovoltaic cell”, *International Workshop PV Trends, 28-30.07.2008, Bucharest, Romania* 2, (2008)
- 2008 Ioan LUMINOSU,[Ioan ZAHARIE](#), Romeo NEGREA, Bogdan CĂRUNTU, “The ray-tracing study of a static paraboloidal concentrator incorporated in southern walls”, *International Workshop PV Trends, 28-30.07.2008, Bucharest, Romania* 2, (2008)
- 2008 Viorel Chiritoiu,[Ioan ZAHARIE](#), Ioan LUMINOSU, “Numerical study of two dimensional quantum hydrodynamic model for semiconductors”, *International Workshop PV Trends, 28-30.07.2008, Bucharest, Romania* 2, (2008)
- 2008 Romeo NEGREA,[Ioan ZAHARIE](#), Bogdan CĂRUNTU, Ioan LUMINOSU, “On 3-dimensional Quantum Hydrodynamic Model for a Photovoltaic Cell”, *5EPS-CMD 22, Europhysics Conference Abstracts, 25-29.08.2008* 32F, 1, (2008)
- 2007 I Luminosu, Ioan Borza, [Ioan ZAHARIE](#), Miodrag Popov, ”Solar installation for garage heating”, *National Conference “Installation for Building and the Ambient Comfort”, Timisoara, April, (2008)*, 507-516
- 2007 [Ioan ZAHARIE](#), Romeo NEGREA, Dușan POPOV, “A Quantum Hydrodynamic Model for a Photovoltaic Cell”, *PIM 2007, 20-22.09.2007, Cluj-Napoca, Romania*, (2007)
- 2007 Ioan Luminosu, [Ioan ZAHARIE](#), Marius Costache, Ioan Damian “Optical concentrators in photovoltaic installations”, *National Conference “Installation for Building and the Ambient Comfort”, Timisoara, March, (2007)* 183-190 *1 ISI citations*
- 2007 Ioan Luminosu, [Ioan ZAHARIE](#), Marius Costache, Ioan Damian “Ray Tracing—an analysis method of optical concentrators”, *National Conference “Installation for Building and the Ambient Comfort”, Timisoara, March, (2007)* 191-199 *1 ISI citations*

Books

- 2018 [Ioan ZAHARIE](#), *Elemente de fizică generală, Ed.9 (2017, 2016, 2015, 2014, 2013, 2009, 2002,2001)*, POLITEHNICA Timișoara, ISBN 973-8247-64-0
- 2017 [Ioan ZAHARIE](#), *Elemente de fizica stării solide. Fenomene și aplicații*, Ed.5 (2016, 2015, 2014, 2013) POLITEHNICA Timișoara, ISBN 978-606-554-716-2
- 2018 [Ioan ZAHARIE](#), *Culegere de Întrebări și Probleme de Fizică*, Ed.8 (2017, 2016, 2015, 2014, 2013,2009,2004), POLITEHNICA Timișoara, ISBN 973-623-109-8
- 2009 Minerva CRISTEA, POPOV Dușan, BARVINSCHI Floricica, Ioan DAMIAN, Ioan LUMINOSU, [Ioan ZAHARIE](#), *Fizică. Elemente Fundamentale*, Ed.3 (2007,2006), POLITEHNICA Timișoara, ISBN 973-625-337-6
- 2008 [Ioan ZAHARIE](#), Ioan LUMINOSU, Corina GRUESCU, Romeo NEGREA *Radiația solară - aplicații în sisteme fotovoltaice*, POLITEHNICA Timișoara, ISBN 978-973-625-434-5
- 2008 POPOV Dușan, PUTZ Mihai, [Ioan ZAHARIE](#), *Informația cuantică în sisteme multiparticulă*, POLITEHNICA Timișoara, ISBN 978-973-635-634-9
- 2003 MARCU Cristian, MIHALCA Ioan, CRĂCIUN Petru, CRISTEA Minerva, DOROBANȚU Vasile, POPOV Dușan, DAMIAN Ioan, LUMINOSU Ioan, BOLDAN Maria, GANGĂL Mariana, BARVINSCHI Floricica, [Ioan ZAHARIE](#), LIGHEZAN Liliana , PRETORIAN Simona , CHIRIȚOIU Viorel, *Teste Grilă de Fizică pentru examenul de bacalaureat și admiterea în învățământul superior*, POLITEHNICA Timișoara, ISBN 973-625-035-0
- 1999 Cristian MARCU, Ioan MIHALCA, Petru CRĂCIUN, Minerva CRISTEA, Dorothea MIHALOVICI, Vasile DOROBANȚU, Dușan POPOV, Ioan LUMINOSU, Ioan DAMIAN, Ioan MIRON, Maria BOLDAN, Mariana GANGĂL, Floricica BARVINSCHI, [Ioan ZAHARIE](#), Sorin BĂLAN, *Probleme de Fizică pentru absolvenții de liceu*, POLITEHNICA Timișoara, ISBN 973-9389-05-8
- 1998 Cristian MARCU, Ioan MIHALCA, Petru CRĂCIUN, Minerva CRISTEA, Dorothea MIHALOVICI, Vasile DOROBANȚU, Dușan POPOV, Ioan LUMINOSU, Ioan DAMIAN, Ioan MIRON, Maria BOLDAN, Mariana GANGĂL, Floricica BARVINSCHI, [Ioan ZAHARIE](#), Sorin BĂLAN *Probleme de Fizică pentru absolvenții de liceu*, POLITEHNICA Timișoara, ISBN 973-9389-05-8
- 1997 C. MARCU, I. MIHALCA, P.CRĂCIUN, M. CRISTEA, D. MIHALOVICI, V.DOROBANȚU, D.POPOV, I.LUMINOSU, I. DAMIAN,I.MIRON, M.BOLDAN, M.GANGĂL, F.BARVINSCHI, [Ioan ZAHARIE](#), S.BĂLAN *TESTE DE FIZICĂ pentru examenele de admitere* , – Centrul de multiplicare. Universitatea POLITEHNICA Timișoara

- 1993 [Ioan ZAHARIE](#) *Culegere de Probleme de Fizică, vol.I*, Centrul de multiplicare Universitatea Tehnică Timișoara
- 1993 [Ioan ZAHARIE](#) *Culegere de Probleme de Fizică, vol.II*, Centrul de multiplicare Universitatea Tehnică Timișoara
- 1991 C. MARCU, I. MIHALCA, P.CRĂCIUN, D. MIHAILOVICI, M. CRISTEA,, V.DOROBANȚU, M. DAVID, I. MIRON, I. DAMIAN, D.POPOV, I.LUMINOSU, M.BOLDAN, M.GANGĂL, S. TERNICEANU, A. ERCUȚA, C. TĂMĂȘDAN, D. VULCANOV, F.BARVINSCHI, [Ioan ZAHARIE](#), O. LIPAN, C. RĂȘINARIU - *TESTE DE FIZICĂ pentru examenele de admitere* , – Centrul de multiplicare. Universitatea TEHNICA Timișoara

Papers under review

- 2019 [Ioan ZAHARIE](#), “On the isothermal crystallization kinetics of Fe₇₀Cr₁₀B₂₀ amorphous alloys”
- 2017 [Ioan ZAHARIE](#), Mircea GOLOSIE, Viorel CARTAȘ, “Monitoring and telemetry system”
- 2017 [Ioan ZAHARIE](#), Daniela ZAHARIE, Constantin BĂRBULESCU, Ildiko TATAI, “Experimental study for using photovoltaic panels at POLITEHNICA University Timisoara ”

Projects

Nr. crt.	research team	grant	contractor	year	value [EURO]
15	Ioan ZAHARIE, Luminosu Ioan, Popov Dușan, Damian Ioan, Chirițoiu Viorel, Costache Marius, Negrea Romeo, Căruntu Bogdan, Hedrea Ciprian, Nicoară Ioan, Gruescu Corina, Popovici Victorița, Buzărnescu Dan, Ignea Darius, Hlihor Sergiu, Luminosu Claudiu	CEEX-247/3-11.09.2006- Research on improving the efficiency of nanostructured photovoltaic cells	AMCSIT	2008	35139.98
14	Robu Nicolae, Jurca Traian, de Sabata Aldo, Dughir Ivan, Robu Raul, Luminosu Ioan, Ioan ZAHARIE, Surianu Dan, Silea Ioan, Nanu Sorin	CNCSIS 44/2006- Platform for the study of concurrent physical, energy, electrical, electronic and chemical processes occurring in the process of converting thermal solar and photovoltaic effect. Automating the functioning and operation of technical installations on based thermal solar conversion	CNCSIS	2008	133054.68
13	Ioan ZAHARIE, Luminosu Ioan, Popov Dușan, Damian Ioan, Chirițoiu Viorel, Costache Marius, Negrea Romeo, Căruntu Bogdan, Gruescu Corina, Popovici Victorița, Buzărnescu Dan, Ignea Darius, Hlihor Sergiu, Luminosu Claudiu	CEEX-247/3-11.09.2006- Research on improving the efficiency of nanostructured photovoltaic cells	AMCSIT	2007	29257.18
12	Robu Nicolae, Jurca Traian de Sabata Aldo, Dughir Ivan, Robu Raul, Luminosu Ioan, Ioan ZAHARIE, Surianu Dan, Silea Ioan, Nanu Sorin,	CNCSIS 44/2006- Platform for the study of concurrent physical, energy, electrical, electronic and chemical processes occurring in the process of converting thermal solar and photovoltaic effect. Automating the functioning and operation of technical installations on based thermal solar conversion	CNCSIS	2007	692176.3

11	Popov Dușan, Ioan ZAHARIE Putz Mihai, Popov Dejan	CNCSIS 647/2007 GR 76/23.05.2007 Tema 29 Contributions to the use of coherent states formalism in quantum information physics	CNCSIS	2007	2807.659
10	Luminosu Ioan, Ioan ZAHARIE Damian Ioan, Costache Marius Cădariu Liviu, Ene Remus, Buzărnescu Dan, Ignea Darius, Oros Andrei, Pungilă Ciprian	CEEX-247/3-11.09.2006- Research on improving the efficiency of nanostructured photovoltaic cells	AMCSIT	2006	9348.844
9	Robu Nicolae, Jurca Traian de Sabata Aldo, Dughir Ivan, Robu Raul, Luminosu Ioan, Ioan ZAHARIE , Surianu Dan, Silea Ioan, Nanu Sorin,	CNCSIS 44/2006- Platform for the study of concurrent physical, energy, electrical, electronic and chemical processes occurring in the process of converting thermal solar and photovoltaic effect. Automating the functioning and operation of technical installations on based thermal solar conversion	CNCSIS	2006	165981
8	Popov Dușan, Ioan ZAHARIE Putz Mihai, Popov Dejan	CNCSIS 647/2006 A1/GR 181/19.05.2006 Tema 28 Contributions to the use of coherent states formalism in quantum information physics	CNCSIS	2006	2496.808
7	Popov Dușan, Ioan ZAHARIE Putz Mihai, Popov Dejan	CNCSIS 647/2005 Tema 25 Contributions to the use of coherent states formalism in quantum information physics	CNCSIS	2005	1821.494
6	Mihalca Ioan, Ercuța Aurel Ioan ZAHARIE	CNCSIS 35034, Tema 25 Magnetoelastic properties and their correlation with the structure of the Fe-based amorphous alloy	CNCSIS	1999	613.6475
5	Mihalca Ioan, Ercuța Aurel, Ioan ZAHARIE	CNCSIS 36, Tema 41 Magnetic properties of amorphous strips RE-TM-M type (RE - Gd, Sm; TM - Fe, Cr; M - B) and their correlation with the structure of crystallization processes	CNCSIS	1998	1001.076

4	Mihalca Ioan, Ercuța Aurel, Ioan ZAHARIE	CNCSIS 7004, Tema 20 Magnetic properties of amorphous strips RE-TM-M type (RE - Gd, Sm; TM - Fe, Cr; M - B) and their correlation with the structure in structural relaxation processes	CNCSIS	1997	926.965
3	Mihalca Ioan, Ercuța Aurel, Ioan ZAHARIE	CNCSIS 5004, Tema 319 Magnetic properties of TM-M amorphous alloys and their correlation with the structure in the crystallization processes - Phase 1 Research crystallization processes of TM-M amorphous alloys	CNCSIS	1997	1035.491
2	Mihalca Ioan, Ercuța Aurel, Ioan ZAHARIE	CNCSIS 4004, Tema 18B Magnetic properties of (Fe-TM)-TM-M amorphous alloys and their correlation with the structure in structural relaxation processes	CNCSIS	1995	456.3588
1	Mihalca Ioan, Ercuța Aurel, Ioan ZAHARIE	CNCSIS 5004C Studies and research on electrical, magnetic and magnetoelastic properties of the amorphous alloys Fe	CNCSIS	1993	1695.682

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